



- CUPC testing relies upon a tiered approach.
  - Bridgepoint provides a model verifier for early model testing
  - Unit testing by engineers
  - Integration testing by integration test team
  - Regression testing by integration test team
  - Formal Qualification Testing by FQT team
  - Verification and Validation Testing by customer/user community supported by engineering/integration and FQT test teams
  - End-to-end Testing by customer/user community supported by engineering
  - Robustness testing by customer/user community and integration test team





 Customer/User community encouraged to participate in Verification and Validation testing, End-to-end testing, and robustness testing





- CUPC validation will occur at both Raytheon and Navy sites (Pt. Mugu/China Lake).
  - Offsite testing will include PTW and weather testing





| Requirements<br>Analysis Stage | Design<br>Stage                             | Implementation<br>Stage | Integration Stage   | Software FQT | Field Test Support  |
|--------------------------------|---|-------------------------|---|--------------|---|
| Requirements<br>Definition     | Model \                                     | Verification Testing    |   |              |   |
|                                | - Scenario Development<br>- Simulation Runs |                         |   |              |   |
|                                |   | <b>Unit Testing</b>     |   |              |   |
|                                |   | - Unit Testonly Han     | d-Written Code  |              |   |
|                                |   |                         | Integration Testing   |              |   |
|                                |   |                         | - Regression Testing<br>- Performance Veriffic<br>- Robustness / Nomir<br>- V&V | ation        |   |
|                                |   | STD Reuse ID            | DII COE Cert  |              |   |
|                                |   |                         | STD Development   |              |   |
|                                |   | -FQ                     | T Test Procedure Deve   | lopment      |   |
|                                |   |                         |   | FQT          |   |
|                                |   |                         |   |              | Field   |
|                                |   |                         |   |              | <ul><li>Encl-to-Encl testing</li><li>DT / OT</li><li>Direct User Feedbace</li></ul> |





| Object | Objective                        | Server | Connected<br>Client | Stand Alone<br>Client |
|--------|----------------------------------|--------|---------------------|-----------------------|
| JC1    | Connect to J MPS Network         |        | Х                   |                       |
|        | Disconnect from J MPS Network    |        | Х                   |                       |
|        | Maintain J MPS Network Data      | Х      |                     | Х                     |
|        | Source Configuration             |        |                     |                       |
|        | Create or Open Mission Binder    | Х      | Х                   | Х                     |
|        | User Interacts with Mission      |        | X                   | Х                     |
|        | Binder                           |        |                     |                       |
|        | CUPC Interaction with Mission    | Х      | Х                   | Х                     |
|        | Binder                           |        |                     |                       |
|        | Backup or Archive Mission        | Х      | Х                   | Х                     |
|        | Binder                           |        |                     |                       |
|        | Restore Mission Binder           | Χ      | Х                   | Х                     |
|        | Erase Mission Binder             | Χ      | Х                   | Х                     |
|        | Link Routes                      |        | Х                   | Х                     |
|        | Interface to Strike Planning     | Χ      | Х                   | Х                     |
|        | Folder                           |        |                     |                       |
|        | Interface to Precision Targeting | Χ      | Х                   |                       |
|        | Workstation                      |        |                     |                       |
|        | Interface to Weather Data        | Х      | Х                   |                       |
|        | Start J MPS                      | Х      | Х                   | Х                     |
|        | End J MPS Session                | Х      | Х                   | Х                     |





#### JC1

| Object     | Objective                 | Server | Connected<br>Client | Stand Alone<br>Client |
|------------|---------------------------|--------|---------------------|-----------------------|
| Aimpoint   | Create or Open Target     | X      | Х                   | Х                     |
|            | Edit Target               | Х      | Х                   | Х                     |
|            | Change Target Type        | Х      | Х                   | Х                     |
|            | Delete Target             | Х      | Х                   | Х                     |
|            | Save Target               | Х      | Х                   | Х                     |
|            | Erase Target              | Х      | Х                   | Х                     |
| Route      | Create or Open Route      | X      | Х                   | Х                     |
|            | Edit Route                | Х      | Х                   | Х                     |
|            | Delete Route              | X      | Х                   | Х                     |
|            | Link Route                | Х      | Х                   | Х                     |
|            | Save Route                | X      | Х                   | Х                     |
|            | Erase Route               | Х      | Х                   | Х                     |
|            | Import/Export Route       | X      | Х                   | Х                     |
| Release    | Create or Open Release    | Х      | Х                   | Х                     |
| Conditions | Conditions                |        |                     |                       |
|            | Edit Release Conditions   | Х      | Х                   | Х                     |
|            | Delete Release Conditions | X      | Х                   | Х                     |
|            | Save Release Conditions   | X      | Х                   | Х                     |
|            | Erase Release Conditions  | Х      | Х                   | Х                     |

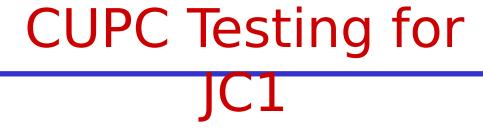




### JC1

| Object        | Objective                       | Server | Connected<br>Client | Stand Alone<br>Client |
|---------------|---------------------------------|--------|---------------------|-----------------------|
| Release       | Create or Open Release Point or | Х      | Х                   | Х                     |
| Point/Waypoin | Waypoint                        |        |                     |                       |
| ts            |                                 |        |                     |                       |
|               | Edit Release Point or Waypoint  | Х      | Х                   | Х                     |
|               | Delete Release Point or         | Х      | Х                   | Х                     |
|               | Waypoint                        |        |                     |                       |
|               | Save Release Point or Waypoint  | Х      | Х                   | Х                     |
|               |                                 |        |                     |                       |
|               | Erase Release Point or          | Χ      | Х                   | X                     |
|               | Waypoint                        |        |                     |                       |
| GPS           | Perform GPS prediction          | Х      | Х                   | Х                     |
| Prediction    |                                 |        |                     |                       |
| Quantity      | Create or Open Quantity         | Х      | Х                   | Х                     |
| Release       | Release                         |        |                     |                       |
|               | Edit Quantity Release           | X      | Х                   | Х                     |
|               | Delete Quantity Release         | Х      | Х                   | Х                     |
|               | Save Quantity Release           | Х      | Х                   | Х                     |
|               | Erase Quantity Release          | Х      | Х                   | Х                     |







| Object        | Objective                     | Server | Connected<br>Client | Stand Alone<br>Client |
|---------------|-------------------------------|--------|---------------------|-----------------------|
| Weaponeering  | Create or Open Weaponeering   | Х      | X                   | X                     |
|               | Data                          |        |                     |                       |
|               | Edit Weaponeering Data        | Х      | Х                   | Х                     |
|               | Change Weaponeering Types     | Х      | Х                   | Х                     |
|               | Delete Weaponeering Data      | Х      | Х                   | Х                     |
|               | Save Weaponeering Data        | Х      | Х                   | Х                     |
|               | Erase Weaponeering Data       | Х      | Х                   | Х                     |
| Distributions | Create or Open a Distribution | Х      | Х                   | Х                     |
|               | Edit a Distribution           | Х      | Х                   | Х                     |
|               | Change Distribution Type      | Х      | Х                   | Х                     |
|               | Delete a Distribution         | Х      | Х                   | Х                     |
|               | Save a Distribution           | Х      | Х                   | Х                     |
|               | Erase a Distribution          | Х      | Х                   | Х                     |
| LAR           | Calculate or recalculate LARs | Х      | Х                   | Х                     |
| Dataload      | Create a dataload             | Х      | Х                   | X                     |





| Object              | Objective                              | Server | Connected<br>Client | Stand Alone<br>Client |
|---------------------|--|--------|---------------------|-----------------------|
| Timing              | Planning occurs in specified timeframe | Х      | X                   | Х                     |
| Performance         | System performs as expected            | Х      | Х                   | X                     |
| Validation          | Field validation performed             | Х      | Х                   | X                     |
| Kneeboards          | Kneeboards are produced correctly      | Х      | X                   | Х                     |
| DTED                | DTED retrieval works as expected       | Х      | Х                   | Х                     |
| Vertical<br>Display | Vertical Display works as expected     | Х      | X                   | Х                     |